INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: February 16, 2009

RE: SDI, Structural and Rail Division / 183-27131-00030

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot12/3/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Mr. Bill Bougher
Steel Dynamics, Inc. Structural and Rail Division
2601 County Road 700 East
Columbia City, Indiana 46725

February 16, 2009

Re: 183-27131-00030
Administrative Amendment to:
Part 70 Source (TV 183-17160-00030)

Dear Mr. Bougher:

Steel Dynamics, Inc. Structural and Rail Division was issued Part 70 operating permit 183-27131-00030 on July 3, 2007 for a steel beam mini-mill. An application to amend the Part 70 permit was received on November 13, 2008. Pursuant to 326 IAC 2-7-11, an administrative amendment to this permit is hereby approved as described in the attached Technical Support Document for the following change:

(a) Modification to the burner capacity of the existing Reheat Furnace ID#2 from 260 million British thermal units per hour (MMBtu/hr) to 320 MMBtu/hr to accommodate larger pieces of steel.

The change to the reheat furnace will not affect or result in an increase to utilization from the emission units upstream or downstream of the reheat furnace.

All other conditions of the permit shall remain unchanged and in effect. Please find a copy of the revised Part 70 permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Aida De Guzman OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for extension (3-4972), or dial (317) 233-4972.

Sincerely,

Donald F. Robin, P.E., Section Chief
Permits Branch
Office of Air Quality

Attachments
APD

cc: Whitley County
Whitley County Health Department
Air Compliance Section Inspector
Compliance Data Section
Permit Administration Support

Permit Administration Support

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Steel Dynamics, Inc. Structural and Rail Division
2601 County Road 700 East
Columbia City, Indiana 46725

(Herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

Except as otherwise stated in this permit, the Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Except as otherwise stated in this permit, noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B.11, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T183-17160-00030	
Issued by: Original Signed By: Nisha Sizemore, Chief Office of Air Quality	Issuance Date: July 3, 2007 Expiration Date: July 3, 2012

First Significant Permit Modification No.: 183-24522-00030, issued on April 15, 2008

First Administrative Amendment No.: 183-27131-00030	
Issued by: Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: February 16, 2009 Expiration Date: July 3, 2012

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary steel beam mini mill.

Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
General Source Phone Number:	(260) 625-8100
SIC Code:	3312
NAICS:	331111
County Location:	Whitley
Source Location Status	Attainment for all criteria pollutants
Source Status:	1 of 28 Listed Source Categories Major source, under PSD Program Major source, under Part 70 Program Minor Source, CAA Section 112

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] 326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b constructed in September 2002. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system consisting of a capture system with a segmented canopy hood, scavenger duct, and cross-draft partitions.

These furnaces utilize the following emission control technologies:

(i) A DEC for carbon monoxide (CO) and volatile organic compounds (VOC) emissions;

(ii) Low NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions; and

(iii) A baghouse (identified as EAFs Baghouse, ID# 1) for filterable particulate emissions.

The particulate and lead emissions escaping the DEC system are collected by the overhead roof exhaust system and exhaust through a stack identified as the EAFs Baghouse stack (Stack 1).

There are no roof monitors in the meltshop.

(b) Ladle Metallurgy Station (LMS) - - Stack 43
One (1) ladle metallurgy refining station (LMS) (ID# 3a) with a nominal rate of 300 tons of steel per hour.

The LMS particulate emissions are collected by the overhead roof exhaust system, controlled by the LMS Baghouse and exhaust through the LMS Baghouse stack (Stack 43).

(c) Continuous Casters (CCs) - - Stack 43
The two (2) continuous casters are limited to a nominal combined casting capacity of 300 tons of steel per hour.

(1) One (1) continuous caster (CC) (ID# 3k) with a nominal casting rate of 200 tons of steel per hour.

(2) One (1) continuous caster, identified as (ID# 42a), with a nominal casting rate of 200 tons of steel per hour.

The particulate emissions from the continuous casters are collected by the overhead roof exhaust system, controlled by the LMS Baghouse and exhaust through the LMS Baghouse stack (Stack 43).

(d) Preheaters
(1) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e), constructed in September 2002, each with a nominal heat input rate of 10 million British thermal units per hour (MMBtu/hr).

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g), constructed in September 2002, with a nominal heat input rate of 10 MMBtu/hr.

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i), constructed in 2002 and approved for modification in 2008, each with a nominal heat input rate of 15 MMBtu/hr.

(4) One (1) natural gas-fired Tundish Nozzle Preheater, identified as (ID# 3m), approved for construction under SSM183-18426-00030, nominally rated at 10 MMBtu/hr.

(5) One (1) natural gas-fired Tundish Preheater, identified as (ID# 3n), constructed in 2002 and approved for modification in 2008, nominally rated at 15 MMBtu/hr.

(6) One (1) natural gas-fired low NOx tundish preheater (ID# 3p), approved for construction in 2008, with a nominal heat input rate of 15 MMBtu/hr.

(7) Four (4) natural gas-fired low NOx horizontal ladle preheaters (ID# 3q, 3r, 3s and 3t), approved for construction in 2008, with a nominal heat input rate of 10 MMBtu/hr, each.

(8) Two (2) natural gas-fired low NOx vertical ladle preheaters (ID# 3u and 3v), approved for construction in 2008, with a nominal heat input rate of 10 MMBtu/hr, each.

Combustion emissions from the preheaters exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAF Baghouse stack (stack 1) and/or LMS Baghouse stack (stack 43).

(e) Dryers
(1) Two (2) natural gas-fired low NO_x ladle dryers (ID# 3f) constructed in September 2002 and (ID# 3l), (to be constructed under SSM183-18426-00030) each with a nominal heat input rate of 10 MMBtu/hr.

(2) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j), constructed in September 2002, with a nominal heat input rate of 5 MMBtu/hr.

(3) One (1) natural gas-fired Tundish Dryer (ID# 3o), (to be constructed under SSM183-18426-00030) nominally rated at 5 MMBtu/hr.

(4) Two (2) natural gas-fired low NOx tundish dryers, (ID# 3w and 3x), approved for construction in 2008, with a nominal heat input rate of 5 MMBtu/hr, each.

Combustion emissions from the dryers exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAF Baghouse stack (stack 1) and/or LMS Baghouse stack (stack 43).

(f) Reheat Furnaces - - Stack 2 and Stack 41

(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2) permitted for construction in 2001 and approved for modification in 2009 to increase its nominal heat input rate from 260 MMBtu/hr to 320 MMBtu/hr.

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NO_x reheat furnace, identified as (ID# 41), permitted for construction in 2005, with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(g) Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40
One (1) ladle vacuum degasser (LVD) (ID# 40), constructed in 2003 with a nominal capacity of 300 tons per hour of steel and one (1) boiler constructed in 2003 to power the LVD. The LVD Boiler (ID# 41) has a nominal heat input capacity of 41.8 MMBtu/hr, and uses natural gas as the primary fuel, with propane as an emergency back up fuel.

Gases from the LVD are directed to the boiler for combustion in the boiler. Emissions from the boiler exhausts through a stack identified as Stack 40.

(h) One (1) EAF dust storage silo (ID# 4), constructed in 2002, equipped with a bin vent filter for particulate control.

(i) Eight (8) raw material storage silos (ID#s 5 through 12), and the associated raw material receiving station, constructed in 2002.

Each silo is equipped with a bin vent filter for particulate control.

(j) A slag handling and processing area (ID# 14) constructed in 2002, operated by an independent contractor, with a nominal rated capacity of 250 tons per hour.

This processing area consists of slag pot dumping, deskulling, slag cooling, digging of slag pits by a front-end loader, loading of grizzly feeder by a front-end loader, crushing, screening, conveyor transfer points, loading of materials into piles, storage piles, load out of materials from piles, and vehicle movement around piles.

(k) Transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles constructed in 2002.

(l) One (1) cooling tower (ID# 13), constructed in 2002, with a nominal water flow of 15,000 gallons per minute.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain

loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.

(b) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

(c) Cleaners and solvents characterized as:
(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or
(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(e) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(f) Refractory storage not requiring air pollution control equipment.

(g) Equipment used exclusively for the following:
(1) Packaging lubricants and greases.
(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.

(h) Production related activities, including the application of: oils; greases, lubricants; and nonvolatile material; as temporary protective coatings.

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding

(j) Closed loop heating and cooling systems.

(k) Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.

(l) Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

(m) Quenching operations used with heat treating processes.

(n) Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(o) Paved and unpaved roads and parking lots with public access.

(p) Conveyors as follows:
(1) Covered conveyors for coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.

(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.

(q) Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) except as provided by 326 IAC 2-7-3, because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22).

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

(a) This permit, T183-17160-00030, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that,

based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:-

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5] [326 IAC 2-2]

Except for the respective construction authorizations, all terms and conditions of the following permits:

PSD Permit Number	Issuance Dates
183-10097-00030	July 7, 1999
183-12692-00030	January 10, 2001
183-15170-00030	May 31, 2002
183-18658-00030	May 5, 2004

Issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. Except for the construction authorizations in Section B of Permit Nos. 183-10097-00030, 183-12692-00030, 183-15170-00030, and 183-18658-00030, these prior permits and all of their terms and conditions are hereby superseded.

B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the Aresponsible official@ as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b), (c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC

2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a permit revision that recognizes a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 5-1-2 (Opacity Limitations) is not federally enforceable.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5] [326 IAC 2-2]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), and 326 IAC 2-2, fugitive particulate matter emissions shall be controlled according to the plan submitted to IDEM and maintained on site.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

The Permittee shall comply with the applicable requirements of 326 IAC 14-10, 326 IAC 18, and 40 CFR 61.140.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation 5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other applicable methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented no later than ninety (90) days after permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated no later than ninety (90) days, after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on May 11, 2003.

(b) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.16 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C.9 - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, no later than thirty (30) days after receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed no later than one hundred twenty (120) days after receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a) (1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32)) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented no later than ninety (90) days after permit issuance.

(c) If there is a reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq) and 326 IAC 2-3-1 (ll))at an existing emissions unit, other than projects at a Clean Unit which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee) and 326 IAC 2-3-1 (z) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and 326 IAC 2-3-1 (mm), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, document and maintain the following records:
  (A) A description of the project.
  (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
  (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
    (i) Baseline actual emissions;
    (ii) Projected actual emissions;
    (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3) and
    (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in (1)(B) above; and

(3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of

regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted no later than thirty (30) days after the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

(f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C.19- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C.19- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C.19- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C.16- General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C.19 - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3.

(4) Any other information that the Permittee wishes to include in this report,

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C.19 - General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Post Construction Ambient Monitoring

C.22 Post Construction Ambient Monitoring [326 IAC 2-2-4]

Pursuant to SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2-4, the two (2) ambient monitoring sites established at locations approved by IDEM, OAQ under PSD Permits CP183-10097-00030 and SSM183-12692-00030 shall continue to operate for an additional 36 months from the initial start of the proposed modification:

(a) A downwind monitoring site near the maximum impact area (Annual Maximum Impact Area: UTM East 639300 and UTM North 4553700) shall measure PM_{10}, ozone, and the following meteorological parameters:
- - wind speed,
- - wind direction, and
- - outdoor temperature.

After the 36-month period, the Permittee may petition IDEM, OAQ, to cease the monitoring activities and the department shall grant such petition no later than 45 days after receipt of the petition if it is established that the PM_{10} and ozone levels continue to comply with the NAAQS and that the plant has minimal impact on air quality.

(b) A monitoring site upwind from the maximum impact area shall measure PM_{10}.

After the 36-month period, the Permittee may petition IDEM, OAQ, to cease the monitoring activities and the department shall grant such petition no later than 45 days after receipt of the petition if it is established that the PM_{10} levels continue to comply with the NAAQS and that the plant has minimal impact on air quality.

(c) The monitors shall meet the operating and maintenance criteria contained in the Indiana Department of Environmental Management, Office of Air Quality, Quality Assurance Manual. Additionally, a monitoring QA plan must be submitted and approved by IDEM, OAQ, if there are any changes to the QA plan.

(d) Ambient data along with precision and accuracy data from the monitors shall be submitted on a quarterly basis in a format approved by the Commissioner no later than sixty (60) days after the end of the quarter being reported.

Source Wide Hazardous Air Pollutant (HAP) Limitations

C.23 Source Wide Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-4.1-1]

(a) Any single HAP emissions from the entire source shall be less then ten (10) tons per year.

(b) Any combination of HAPs emissions from the entire source shall be less than twenty-five (25) tons per year.

Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) Electric Arc Furnaces (EAFs) - - Stack 1
Two (2) single shell electric arc furnaces (EAFs), identified as EAF-1a and EAF-1b. These furnaces operate at a nominal combined rate of 300 tons of molten steel per hour and utilize a direct-shell evacuation control (DEC) system ("fourth hole" duct), an overhead roof exhaust system consisting of a capture system consisting of a segmented canopy hood, scavenger duct, and cross-draft partitions.

These furnaces utilize the following emission control technologies:

(i) A DEC for carbon monoxide (CO) and volatile organic compounds (VOC) emissions;

(ii) Low NO_x/oxyfuel burners (combustion control) for nitrogen oxide (NO_x) emissions; and

(iii) A baghouse (identified as EAFs Baghouse, ID# 1) for filterable particulate emissions.

The particulate and lead emissions escaping the DEC system are collected by the overhead roof exhaust system and exhaust through a stack identified as the EAFs Baghouse stack (Stack 1).

There are no roof monitors in the meltshop.

(b) Ladle Metallurgy Station (LMS) - - Stack 43
One (1) ladle metallurgy refining station (LMS) (ID# 3a) with a nominal rate of 300 tons of steel per hour.

The LMS particulate emissions are collected by the overhead roof exhaust system, controlled by the LMS Baghouse and exhaust through the LMS Baghouse stack (Stack 43).

(c) Continuous Casters (CCs) - - Stack 43
The two (2) continuous casters are limited to a nominal combined casting capacity of 300 tons of steel per hour.

(1) One (1) continuous caster (CC) (ID# 3k) with a nominal casting rate of 200 tons of steel per hour.

(2) One (1) continuous caster, identified as (ID# 42a), with a nominal casting rate of 200 tons of steel per hour.

The particulate emissions from the continuous casters are collected by the overhead roof exhaust system, controlled by the LMS Baghouse and exhaust through the LMS Baghouse stack (Stack 43).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 EAFs Operation Limitation [326 IAC 2-1.1-5] [326 IAC 2-2]

Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, 326 IAC 2-1.1-5 (Air Quality Requirements) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall operate EAF-1a and EAF-1b at a maximum combined rate of:

(a) 300 tons of molten steel per hour, and

(b) 2,628,000 tons of molten steel per 12-consecutive month period, with compliance determined at the end of each month.

D.1.2 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by SSM 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the EAF-1a and EAF-1b auxiliary burners shall be equipped with Low NO_x/oxyfuel burners.

(b) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the total NO_x emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 0.35 pounds per ton of steel produced and 105 pounds of NO_x per hour, based on a three (3) hour block average.

D.1.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 12-1, apply to the EAFs except when otherwise specified in 40 CFR Part 60, Subpart AAa.

D.1.4 Particulate Matter (PM) [40 CFR Part 60, Subpart AAa]

Pursuant to 40 CFR Part 60, Subpart AAa (Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983), the filterable PM emissions from the EAFs Baghouse shall not exceed 0.0052 grains per dry standard cubic feet.

D.1.5 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, PSD SSM 183-23905-00030 and 326 IAC 2-2 (PSD – Control Technology Review Requirements):

(a) Filterable PM/PM_{10} emissions from EAF-1a and EAF-1b shall be controlled by the EAFs Baghouse.

(b) The total filterable PM/PM_{10} emissions from the EAFs Baghouse shall not exceed 0.0018 grains per dry standard cubic feet and 14.4 pounds per hour based on a 3-hour block average.

(c) The total filterable and condensable PM_{10} emissions from the EAFs Baghouse shall not exceed 0.0052 grains per dry standard cubic feet and 41.6 pounds per hour based on a 3-hour block average.

(d) There shall be no roof monitors in the melt shop.

(e) The meltshop shall be located in a total enclosure subject to general ventilation that maintains the meltshop at a lower than ambient pressure to ensure in-draft through any doorway opening.

Ventilation air from the total enclosure shall be conveyed to the EAFs Baghouse.

(f) A segmented canopy hood shall be maintained above EAF-1a and EAF-1b. The canopy shall be divided into separate sections and the dampers operated in a manner that will promote good capture efficiency for the EAFs Baghouse.

D.1.6 Sulfur Dioxide (SO_2) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), SO_2 emissions from EAF-1a and EAF-1b shall be controlled in accordance with the Scrap Management Program (SMP) (Section E.2)

(b) Pursuant to PSD SSM 183-18426-00030**,** issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total SO_2 emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 0.25 pounds per ton of steel and 75 pounds of SO_2 per hour based on a three (3) hour block average.

(c) Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001**,** and amended by 183-18658-00030, issued May 5, 2004**,** and 326 IAC 2-1.1-11:

(1) The sulfur content of the direct reduced iron (DRI), charge carbon, and injection carbon added into the EAFs shall not exceed the following:

Raw Material	Sulfur Content (%)
direct reduced iron (DRI)	0.20
charge carbon	0.6
injection carbon	2.5

(2) The Permittee may utilize the following alternative mixture of sulfur content of the charge carbon and injection carbon added into the EAFs:

Raw Material	Sulfur Content (%)
charge carbon	2.0
injection carbon	4.0

The Permittee shall not use DRI when charging this alternative mixture to the EAFs.

(3) The Permittee shall obtain vendor certifications and/or analyses to verify that shipments of DRI, charge carbon, and injection carbon do not exceed the thresholds stated in Conditions D.1.6(c)(1) and D.1.6(c)(2).

D.1.7 Carbon Monoxide (CO) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001, and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the CO emissions from EAF-1a and EAF-1b shall be controlled by thermal oxidation and by maintaining a negative pressure at the direct-shell evacuation control (DEC) system air gap.

(b) Pursuant to PSD SSM183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total CO emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 2.0 pounds per ton of steel produced and 600 pounds of CO per hour, based on a three (3) hour block average.

D.1.8 Carbon Monoxide (CO) [326 IAC 9-1]

Pursuant to 326 IAC 9-1 (Carbon Monoxide Emission Limits), the Permittee shall not allow the discharge of CO from an EAF unless the waste gas stream is controlled by a direct-flame afterburner, boiler, or other approved method. The Permittee has elected thermal oxidation at the direct-shell evacuation control (DEC) system air gap, which is an OAQ approved method.

D.1.9 Volatile Organic Compounds (VOC) - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001, and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the VOC emissions from EAF-1a and EAF-1b shall be minimized in accordance with the Scrap Management Program (SMP) (Section E.2) and shall be

controlled by thermal oxidation and by maintaining a negative pressure at the direct-shell evacuation control (DEC) system air gap.

(b) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total VOC emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 0.09 pounds per ton of steel and 27 pounds of VOC per hour, based on a three (3) hour block average.

(c) These VOC limits are as defined in 326 IAC 1-2-90.

D.1.10 Lead - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the lead emissions from EAF-1a and EAF-1b shall be:

(1) minimized in accordance with the Scrap Management Program (SMP) (Section E.2), and

(2) controlled by a baghouse.

(b) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total lead emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 0.00048 pounds per ton of steel and 0.144 pounds of lead per hour, based on a three (3) hour block average.

D.1.11 Mercury - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the mercury emissions from EAF-1a and EAF-1b shall be:

(1) minimized in accordance with the Scrap Management Program (SMP) (Section E.2), and

(2) controlled by a baghouse.

(b) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total mercury emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 5.21 $x10^{-4}$ pounds per ton of steel and 0.1563 pounds of mercury per hour, based on a three (3) hour block average.

D.1.12 Fluorides- PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 (PSD - Control Technology Review~~;~~ Requirements), the fluoride emissions from EAF-1a and EAF-1b shall be:

(1) minimized by using the granular type of Fluorspar, instead of the powdered type and

(2) controlled by a baghouse.

(b) Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the total fluoride emissions from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) shall not exceed 0.01 pounds per ton of steel and 2.09 pounds of Fluorides per hour based on a three (3) hour block average.

D.1.13 Hazardous Air Pollutant (HAP) Limitations [326 IAC 2-1.1-4] [326 IAC 2-2] [326 IAC 2-4.1-1]

Pursuant to PSD SSM 183-18426-00030**,** issued November 18, 2005 and 326 IAC 2-1.1-4, the Permittee shall not allow:

(a) Beryllium to be emitted from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) in a total quantity equal to or greater than 8.6×10^{-5} pounds per hour.

(b) Manganese compounds to be emitted from the EAFs Baghouse stack (stack 1) and LMS Baghouse stack (stack 43) in a total quantity equal to or greater than 2.28 pounds per hour.

Compliance with these limitations will assure that the requirements of 326 IAC 2-2 Prevention of Significant Deterioration (PSD) do not apply for beryllium and that the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to the source.

D.1.14 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, PSD SSM 183-23905-00030 and 326 IAC 2-2 (PSD – Control Technology Review~~;~~ Requirements):

(a) Visible emissions of the stack exhaust from the EAFs Baghouse (Stack 1) shall not exceed three percent (3%) opacity based on a six (6) minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(b) Visible emissions of the stack exhaust from the LMS Baghouse (Stack 43) shall not exceed three percent (3%) opacity, based on a six (6) minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

(c) Particulate matter (PM and PM_{10}) emissions from the EAFs Baghouse shall not exceed three percent (3%) opacity based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9) when emitted from any building opening.

Compliance with the above opacity limitations shall also satisfy the requirements of 326 IAC 5-1-2 (Opacity Limitations) under Condition C.2 - Opacity.

D.1.15 Visible Emission Limitations [40 CFR Part 60, Subpart AAa]

Pursuant to 40 CFR 20.272a(a), the Permittee shall not cause to discharge into the atmosphere from the EAFs any gases that:

(a) Exit from the EAFs Baghouse stack (Stack 1) and exhibit three percent (3%) opacity or greater; and

(b) Exit from the melt shop, and due solely to the operations of EAF-1a and EAF-1b, exhibit six percent (6%) opacity or greater.

Compliance with the above opacity limitations shall also satisfy the requirements of 326 IAC 5-1-2 (Opacity Limitations) under Condition C.2 - Opacity.

D.1.16 Ladle Metallurgy Station (LMS) and Continuous Casters (CC) - PSD Best Available Control Technology (BACT) [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, PSD SSM 183-23905-00030 and 326 IAC 2-2-3 (PSD - BACT):

(a) PM/PM10 emissions from the Ladle Metallurgical Station (ID# 3a) and Continuous Casters (ID# 3k and ID# 42a) shall be controlled by the LMS Baghouse.

(b) The PM/PM10 emissions from the following facilities are limited as indicated in the table below:

Stack #: Process/facility Description (ID)	Filterable PM/PM10 Emissions		Filterable Plus Condensable PM10 Emissions	
	(gr/dscf)	(lb/hr)	(gr/dscf)	(lb/hr)
Stack 43: Ladle Metallurgical Station (ID# 3a) and Continuous Casters (ID# 3k and ID# 42a)	0.0018	3.9	0.0052	11.2

D.1.17 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001, and 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP) of this permit, is required for EAF-1a, EAF-1b and LMS and their associated control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.1.18 Baghouse Operation [326 IAC 2-2] [326 IAC 2-7-6(6)]

In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.19 Testing Requirements [326 IAC 2-1.1-11] [40 CFR 60.275a]

Pursuant 326 IAC 2-1.1-11:

(a) NOx
The Permittee shall test for NOx on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This NOx test shall be repeated at least once every 2.5 years from the date of the last valid compliance demonstration.

(b) Within 180 days after startup of the EAF Baghouse (following its modification permitted by PSD SSM 183-23905-00030), the Permittee shall perform PM/PM_{10} testing on the stack emissions from the EAF Baghouse (stack 1) in order to demonstrate compliance with the PM/PM_{10} limits established by 326 IAC 2-2 and 40 CFR Part 60. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10} for the purpose of determining compliance with 326 IAC 2-2. Testing shall be completed using methods approved by the Commissioner and conducted in accordance with Section C - Performance Testing.

(c) Within 180 days after startup of the LMS Baghouse, the Permittee shall perform PM/PM_{10} and opacity testing on the emissions from the LMS Baghouse (stack 43) in order to demonstrate compliance with the PM/PM_{10} and opacity limits established by 326 IAC 2-2. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM_{10} includes filterable and condensable PM_{10} for the purpose of determining compliance with 326 IAC 2-2. Testing shall be completed using methods approved by the Commissioner and conducted in accordance with Section C - Performance Testing.

(d) Lead
The Permittee shall stack test for lead on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43), utilizing Method 12 and a method detection level which is below the emission limit, within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This lead test shall be repeated at least once every year from the date of the last valid compliance demonstration.

(e) SO_2
The Permittee shall test for SO_2 on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This SO_2 test shall be repeated at least once every 2.5 years from the date of the last valid compliance demonstration.

(f) Mercury
The Permittee shall test for mercury on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This mercury test shall be repeated at least once every year from the date of the last valid compliance demonstration.

(g) Fluorides
The Permittee shall test for fluorides on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This fluorides test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration.

(h) Manganese
The Permittee shall test for manganese on the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) within 60 days after achieving maximum capacity of the modification, but no later than 365 days after start up of the modification, utilizing methods as approved by the Commissioner.

This manganese test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration.

(i) All testing shall be conducted in accordance with C.9 - Performance Testing.

D.1.20 CO and VOC Continuous Emission Rate Monitoring Requirement [326 IAC 2-1.1-11] [326 IAC 3-5]

(a) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 3-5-1(d), the Permittee shall calibrate, certify, operate, and maintain a continuous emission monitoring system (CEMS) for measuring CO and VOC emissions rates in pounds per hour from the EAFs Baghouse stack (Stack 1) and the LMS Baghouse stack (Stack 43) in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

(b) Pursuant to 326 IAC 2-1.1-11 and 326 IAC 3-5-4(a), the Permittee shall submit to IDEM, OAQ, within ninety (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP). If revisions are made to an existing SOP, updates shall be submitted to IDEM, OAQ biennially.

(c) Pursuant to 326 IAC 2-1.1-11, the Permittee shall record the output of the system and shall perform the required record keeping, pursuant to 326 IAC 3-5-6, and reporting, pursuant to 326 IAC 3-5-7.

(d) Whenever the CO or VOC continuous emission monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, the Permittee shall perform once per day operational status inspections of the equipment that is important to the performance of the DEC, canopy hood and total capture system (i.e., pressure sensors, dampers, and damper switches).

This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion) unless such observations require the process units to be inoperative.

Any deficiencies shall be noted and proper maintenance performed. This requirement does not replace the routine monthly inspections of the same equipment.

D.1.21 Vsible Emission Observations and Continuous Opacity Monitoring (COM) [326 IAC 2-1.1-11] [326 IAC 3-5] [40 CFR 60.273a]

(a) Pursuant to 326 IAC 2-1.1-11, 326 IAC 3-5, and 40 CFR 60.273a:

(1) The Permittee shall calibrate, certify, operate, and maintain a continuous monitoring system (COMS) to measure opacity from the EAFs Baghouse stack (Stack 1) in accordance with 326 IAC 3-5-2 and 3-5-3.

(2) The Permittee shall submit to IDEM, OAQ, within (90) days after installation of a new monitor, a complete written continuous monitoring standard operating procedure (SOP). If revisions are made to the SOP, updates shall be submitted to IDEM, OAQ biennially.

(b) The COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall provide a certified opacity reader, who may be an employee of the Permittee or an independent contractor, to self-monitor the emissions from the emission unit stack.

(1) Visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of five (5) consecutive six (6) minute averaging periods beginning not more than twenty-four (24) hours after the start of the malfunction or down time.

(2) Method 9 opacity readings shall be repeated for a minimum of five (5) consecutive six (6) minute averaging periods at least twice per day during daylight operations, with at least four (4) hours between each set of readings until a COM is online.

(3) Method 9 readings may be discontinued once a COM is online.

(4) Any opacity exceedances determined by Method 9 readings shall be reported with the Quarterly Opacity Exceedances Reports.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 60.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.22 Bag Leak Detection System (BLDS) [326 IAC 2-2]

Pursuant to PSD SSM 183-18426-00030**,** issued November 18, 2005:

(a) The Permittee shall operate continuous bag leak detection systems (BLDS) for the EAFs Baghouse. The bag leak detection systems (BLDS) shall meet the following requirements:

(1) The bag leak detection systems (BLDS) must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 0.0018 grains per actual cubic foot or less.

(2) The bag leak detection system (BLDS) sensor must provide output of relative particulate matter loading.

(3) The bag leak detection system (BLDS) must be equipped with an alarm system that will alarm when an increase in relative particulate loading is detected over a preset level.

(4) The bag leak detection system (BLDS) shall be operated in a manner consistent with available written guidance from the U.S. Environmental Protection Agency or, in the absence of such written guidance, the manufacturer's written specifications and recommendations for operation, and adjustment of the system.

(5) In no event shall the sensitivity be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless such adjustment follows a complete baghouse inspection which demonstrates the baghouse is in good operating condition.

(6) The bag detector must be installed downstream of the baghouse.

(b) In the event of a bag leak detection system alarm:

(1) The affected compartments will be shut down as soon as possible until the failed units have been repaired or replaced.

(2) Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B.11 - Emergency Provisions).

(3) The Permittee shall take response steps according to the timetable described in the Section C.16 – Response to Excursions or Exceedances shall be initiated.

For any failure with corresponding response steps and timetable not described in the Section C.16 – Response to Excursions or Exceedances, response steps shall be devised no later than eight (8) business hours of discovery of the failure and shall include a timetable for completion.

(3) Failure to take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced.

The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.23 Monitoring of Operations [40 CFR 60.274a]

Pursuant to 40 CFR 60.274a, the Permittee shall comply with the following monitoring requirements:

(a) Except as provided under subsection (e) of this condition, the Permittee shall check and record on a once per shift basis the furnace static pressure if the DEC system is in use, and a furnace static pressure gauge is installed according to subsection (d) of this condition and either:

(1) check and record the control system fan motor amperes and damper positions on a once-per-shift basis; or

(2) calibrate, and maintain a monitoring device that continuously records the volumetric flow rate through each separately ducted hood; or

(3) calibrate, and maintain a monitoring device that continuously records the volumetric flow rate at the control device inlet and records damper positions on a once-per-shift basis.

The monitoring device(s) may be installed in any appropriate location in the exhaust duct such that reproducible flow rate monitoring will result.

The flow rate monitoring device(s) shall have an accuracy of $\pm$ 10 percent over its normal operating range and shall be calibrated according to the manufacturer's instructions.

The IDEM, OAQ, or the U.S. EPA may require the Permittee to demonstrate the accuracy of the monitoring device(s) relative to Methods 1 and 2 of 40 CFR Part 60, Appendix A.

(b) The Permittee shall determine either:

(1) the control system fan motor amperes and all damper positions or
(2) the volumetric flow rate through each separately ducted hood

during all periods in which a hood is operated for the purpose of capturing emissions from the EAFs.

(c) The Permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches).

This inspection shall include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion). Any deficiencies shall be noted and proper maintenance performed.

(d) Except as provided under item (f) of this condition, if emissions during any phase of the heat time are controlled by the use of a DEC system, the Permittee shall calibrate, and maintain a monitoring device that allows the pressure in the free space inside the EAF to be monitored. The pressure shall be recorded as 15-minute integrated averages.

The monitoring device may be installed in any appropriate location in the EAF or DEC duct prior to the introduction of ambient air such that reproducible results will be obtained.

The pressure monitoring device shall have an accuracy of ± 5 millimeter of water gauge over its normal operating range and shall be calibrated according to the manufacturer's instructions.

(e) Except as provided under item (f) of this condition, when the Permittee is required to demonstrate compliance with the standard under Condition D.1.15(b) and at any other time the U.S. EPA may require under Section 114 of the CAA, the pressure in the free space inside the EAF shall be determined during the melting and refining period(s) using the monitoring device required under item (d) of this condition.

The pressure determined during the most recent demonstration of compliance shall be maintained at all times when the EAF is operating in a melting and refining period.

(f) Pursuant to 40 CFR 60.273a(d), a furnace static pressure monitoring device is not required on any EAF equipped with a DEC system if observations of the shop opacity are performed by a certified visible emission observer as follows:

(1) Shop opacity observations shall be conducted at least once per day when the furnace is operating in the melting and refining period.

(2) Shop opacity shall be determined as the arithmetic average of 24 consecutive 15-second opacity observations of emissions from the shop taken in accordance with Method 9.

(3) Shop opacity shall be recorded for any point(s) where visible emissions are observed. Where it is possible to determine that a number of visible emission sites relate to only one incident of visible emissions, only one observation of shop opacity will be required.

(4) In this case, the shop opacity observations must be made for the site of highest opacity that directly relates to the cause (or location) of visible emissions observed during a single incident.

D.1.24 Monitoring for Total Building Enclosure [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001, and 326 IAC 2-2, the Permittee shall demonstrate compliance with the requirement to provide total enclosure of the meltshop using the procedures listed in either (1) or (2) below:

This compliance demonstration shall be repeated at the time of each Method 12 stack test for lead emissions from the meltshop baghouse stack.

The results of this compliance demonstration shall be submitted to IDEM, OAQ with the test results of each Method 12 stack test for lead emissions from the meltshop baghouse.

(1)(A) The Permittee shall use a propeller anemometer or equivalent device meeting the requirements specified in (i) through (iii) below:

(i) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(ii) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(iii) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable readout system.

(B) Doorway in-draft shall be determined by placing the anemometer in the plane of the doorway opening near its center.

(C) Doorway in-draft shall be demonstrated for each doorway that is open during normal operation with all remaining doorways in the position that they are in during normal operation.

When the doorway in-draft is not demonstrated for any doorway that is open during normal operation, the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

(2)(A) The Permittee shall install a differential pressure gauge on the leeward wall of the building to measure the pressure difference between the inside and outside of the building.

(B) The pressure gauge shall be certified by the manufacturer to be capable of measuring pressure differential in the range of 0.02 to 0.2 mm Hg.

(C) Both the inside and outside taps shall be shielded to reduce the effects of wind.

(D) The Permittee shall demonstrate the inside of the building is maintained at a negative pressure as compared to the outside of the building of no less than 0.02 mm Hg when all doors are in the position they are in during normal operation.

When the pressure differential between the inside and outside of the building is less than 0.02 mm Hg the Permittee shall take reasonable response steps in accordance with Section C.16 – Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 – Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.25 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the LMS Baghouse shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

D.1.26 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the LMS baghouse at least once per day when the respective facilities are in operation.

(b) When for any one reading, the pressure drop is outside the normal range of 3.0 and 9.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(c) The instrument used for determining the pressure drop shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.27 Record Keeping Requirements [326 IAC 2-1.1-11] [40 CFR 60.276a]

(a) To document compliance with Conditions D.1.20 and D.1.21, the Permittee shall maintain records required under 326 IAC 3-5-6 at the source in a manner so that they may be inspected by the IDEM, OAQ, or the U.S. EPA., if so requested or required.

(b) To document compliance with Condition D.1.1 - EAFs Operation Limitation, the Permittee shall maintain records of the amount of steel produced.

(c) To document compliance with Conditions D.1.7 - CO PSD BACT and D.1.9 - VOC PSD BACT, the Permittee shall maintain records of the readings of the CO and VOC CEMS.

(d) To document compliance with Condition D1.21(d), the Permittee shall maintain records of visible emission readings required by those conditions and make the records available upon request to IDEM, OAQ, and the U.S. EPA.

(e) Pursuant to 40 CFR 60.276a, records of the measurements required in 40 CFR 60.274a must be retained for at least 5 years following the date of the measurement.

(f) In order to demonstrate compliance with Condition D.1.6, the Permittee shall maintain records of the verification of sulfur content of DRI, charge carbon, and injection carbon added into the EAFs.

(g) In order to demonstrate compliance with Condition D.1.24, the Permittee shall maintain records of the dates and times of all bag leak detection system alarms, the cause of each alarm, and an explanation of all corrective actions taken.

(h) To document compliance with Condition D.1.23, the Permittee shall also maintain records of the dates and results of the sensor inspections, response tests, electronic drift checks, and response steps taken.

(i) To document compliance with Condition D.1.25, the Permittee shall maintain records of the visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(j) To document compliance with Condition D.1.26, the Permittee shall maintain records of the pressure drop readings required by that condition. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(k) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

(l) Records necessary to demonstrate compliance shall be available not later than 30 days of the end of each compliance period.

D.1.28 Reporting Requirements [326 IAC 2-1.1-11] [40 CFR 60.276a]

(a) To document compliance with Condition D.1.1 - EAFs Operation Limitation, the Permittee shall submit a quarterly summary of the actual amount of steel produced, using the Steel Production Report or its equivalent, located at the end of this permit. These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter and in accordance with Condition C.20 - General Reporting Requirements of this permit.

(b) The Permittee shall submit a quarterly excess emissions report, if applicable, based on the continuous emissions monitor (CEM) data for CO and VOC, and continuous opacity monitor (COM) data, pursuant to 326 IAC 3-5-7.

These reports shall be submitted not later than thirty (30) calendar days following the end of each calendar quarter and in accordance with Condition C.20- General Reporting Requirements of this permit.

(c) Pursuant to 40 CFR 60.276a, the Permittee shall comply with the following reporting requirements:

(i) The Permittee shall submit a semi-annual written report of exceedances of the control device opacity to IDEM, OAQ, and upon request, the U.S. EPA.

(ii) If applicable the Permittee shall submit semi-annually any values that exceed the furnace static pressure value established under 40 CFR 60.274a(g) and either values of control system fan motor amperes that exceed 15 percent of the value established under 40 CFR 60.274a(c) or values of flow rates lower than those established under 40 CFR 60.274a(c) to IDEM, OAQ, and upon request, the U.S. EPA.

(iii) The Permittee shall furnish to IDEM, OAQ, and the U.S. EPA a written report of the results of the compliance emission tests. This report shall include the following information:

(A) Facility name and address;

(B) Plant representative;

(C) Make and model of process, control device, and continuous monitoring equipment;

(D) Flow diagram of process and emissions capture equipment including other equipment or process(es) ducted to the same control device;

(E) Rated (design) capacity of process equipment;

(F) The following operating conditions:

(1) List of charge and tap weights and materials;

(2) Heat times and process log;

(3) Control device operation log; and

(4) Continuous monitor or Reference Method 9 data.

(G) Test dates and test times;

(H) Test company;

(I) Test company representative;

(J) Test observers from outside agency;

(K) Description of test methodology used, including any deviation from standard reference methods;

(L) Schematic of sampling location;

(M) Number of sampling points;

(N) Description of sampling equipment;

(O) Listing of sampling equipment calibrations and procedures;

(P) Field and Laboratory data sheets;

(Q) Description of sample recovery procedures;

(R) Sampling equipment leak check results;

(S) Description of quality assurance procedures;

(T) Description of analytical procedures;

(U) Notation of sample blank corrections; and

(V) Sample emission calculations.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Preheaters

(1) Four (4) natural gas-fired low NO_x ladle preheaters (IDs 3b through 3e), each with a nominal heat input rate of 10 million British Thermal Units per hour (MMBtu/hr).

(2) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g), constructed in 2002, with a nominal heat input rate of 10 MMBtu/hr.

(3) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i), constructed in 2002 and approved for modification in 2008, each with a nominal heat input rate of 15 MMBtu/hr.

(4) One (1) natural gas-fired Tundish Nozzle Preheater, identified as (ID# 3m), approved for construction under SSM183-18426-00030, nominally rated at 10 MMBtu/hr.

(5) One (1) natural gas-fired Tundish Preheater, identified as (ID# 3n), constructed in 2002 and approved for modification in 2008, nominally rated at 15 MMBtu/hr.

(6) One (1) natural gas-fired low NOx tundish preheater (ID# 3p), approved for construction in 2008, with a nominal heat input rate of 15 MMBtu/hr.

(7) Four (4) natural gas-fired low NOx horizontal ladle preheaters (ID# 3q, 3r, 3s and 3t), approved for construction in 2008, with a nominal heat input rate of 10 MMBtu/hr, each.

(8) Two (2) natural gas-fired low NOx vertical ladle preheaters (ID# 3u and 3v), approved for construction in 2008, with a nominal heat input rate of 10 MMBtu/hr, each.

Combustion emissions from the preheaters exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAF Baghouse stack (stack 1) and/or LMS Baghouse stack (stack 43).

Dryers

(1) Two (2) natural gas-fired low NO_x ladle dryers (ID# 3f and ID# 3l), each with a nominal heat input rate of 10 MMBtu/hr.

(2) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j), with a nominal heat input rate of 5 MMBtu/hr.

(3) One (1) natural gas-fired Tundish Dryer (ID# 3o), (to be constructed under SSM183-18426-00030) nominally rated at 5 MMBtu/hr.

(4) Two (2) natural gas-fired low NOx tundish dryers, (ID# 3w and 3x), approved for construction in 2008, with a nominal heat input rate of 5 MMBtu/hr, each.

Combustion emissions from the dryers exhaust inside the building, and are collected by the overhead roof exhaust system and ducted to the EAF Baghouse stack (stack 1) and/or LMS Baghouse stack (stack 43).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Nitrogen Oxides (NO_X) Emissions [326 IAC 2-2]

Pursuant to PSD SSM 183-23905-00030:

(a) The total natural gas combusted by tundish preheaters ID# 3p, 3n, 3h and 3i shall be less than 241 million standard cubic feet (MMSCF) per twelve consecutive month period with compliance determined at the end of each month.

(b) The NOx emissions from tundish preheater ID# 3p, ladle preheaters ID# 3q, 3r, 3s, 3t, 3u and 3v and tundish dryers ID# 3w and 3x shall not exceed 0.1 pounds per MMBtu.

Compliance with these limits, and the NOx BACT limits on preheaters ID# 3n, 3h and 3i, is equal to a NOx emission increase from the modification of less than 40 tons per year and renders the requirements of 326 IAC 2-2 not applicable.

D.2.2 PM/PM10 Emissions - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD SSM 183-23905-00030 and 326 IAC 2-2-3 (PSD - BACT), the PM/PM10 emissions from tundish preheaters ID# 3p, 3h, 3i, ladle preheaters ID# 3q, 3r, 3s, 3t, 3u and 3v and tundish dryers ID# 3w and 3x shall not exceed 0.0076 pounds per MMBtu.

Compliance with these limitations shall satisfy the requirements of 326 IAC 2-2.

D.2.3 Nitrogen Oxides (NO_x) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD CP183-10097-00030, issued July 7, 1999, amended by PSD SSM183-12692-00030, issued January 10, 2001, and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the following units:

(a) Four (4) natural gas-fired low NO_x ladle preheaters (ID#s 3b through 3e),

(b) One (1) natural gas-fired low NO_x tundish nozzle preheater (ID# 3g),

(c) Two (2) natural gas-fired low NO_x tundish preheaters (ID#s 3h and 3i),

(d) One (1) natural gas-fired low NO_x ladle dryer (ID# 3f), and

(e) One (1) natural gas-fired low NO_x tundish dryer (ID# 3j)

shall use low NO_x natural gas-fired burners and NO_x emissions shall not exceed 0.10 pound per MMBtu.

D.2.4 Ladle Dryer - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, PSD SSM 183-23905-00030 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall comply with the following Best Available Control Technology (BACT) requirements:

(a) The second ladle dryer (ID# 3l) shall use natural gas as fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the second ladle dryer (ID# 3l).

(c) The nitrogen oxides (NO_x) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.1 pounds per MMBtu based on a three (3) hour block average.

(d) The carbon monoxide (CO) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.084 pounds per MMBtu based on a three (3) hour block average.

(e) The volatile organic compound (VOC) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.0055 pounds per MMBtu based on a three (3) hour block average.

(f) The sulfur dioxide (SO_2) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.0006 pounds per MMBtu based on a three (3) hour block average.

(g) The PM (filterable) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.0019 pounds per MMBtu based on a three (3) hour block average.

(h) The PM_{10} (filterable and condensable) emissions from the second ladle dryer (ID# 3l) shall not exceed 0.0076 pounds per MMBtu based on a three (3) hour block average.

(i) Good combustion practices shall be observed.

D.2.5 Tundish Nozzle Preheater - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD SSM183-18426-00030, issued November 18, 2005, PSD SSM 183-23905-00030**,** and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Nozzle Preheater (ID# 3m) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Nozzle Preheater (ID# 3m).

(c) The NO_x emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.1 pounds per MMBtu based on a 3-hour block average.

(d) The CO emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.084 pounds per MMBtu based on a 3-hour block average.

(e) The VOC emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0055 pounds per MMBtu based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0006 pounds per MMBtu based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Nozzle Preheater (ID# 3m) shall not exceed 0.0076 pounds per MMBtu based on a 3-hour block average.

(h) Good combustion practices shall be observed.

D.2.6 Tundish Preheater - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, PSD SSM 183-23905-00030 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Preheater (ID# 3n) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Preheater (ID# 3n).

(c) The NO_x emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.1 pounds per MMBtu based on a 3-hour block average.

(d) The CO emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.084 pounds per MMBtu based on a 3-hour block average.

(e) The VOC emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0054 pounds per MMBtu based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0006 pounds per MMBtu based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Preheater (ID# 3n) shall not exceed 0.0076 pounds per MMBtu based on a 3-hour block average.

(h) Good combustion practices shall be observed.

D.2.7 Tundish Dryer - PSD Best Available Control Technology Limits [326 IAC 2-2]

Pursuant to PSD SSM183-18426-00030, issued November 18, 2005, and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Tundish Dryer (ID# 3o) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Tundish Dryer (ID# 3o).

(c) The NO_x emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.1 pounds per MMBtu, based on a 3-hour block average.

(d) The CO emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.084 pounds per million Btu based on a 3-hour block average.

(e) The VOC emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0055 pounds per MMBtu based on a 3-hour block average.

(f) The SO_2 emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0006 pounds per MMBtu based on a 3-hour block average.

(g) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Tundish Dryer (ID# 3o) shall not exceed 0.0076 pounds per MMBtu based on a 3-hour block average.

(h) Good combustion practices shall be observed.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.8 Record Keeping Requirements

To document compliance with Condition D.2.1, the Permittee shall maintain daily records of the fuel used by tundish preheaters ID# 3p, 3n, 3h and 3i. All records shall be maintained in accordance with Condition C.19 (General Record Keeping Requirements) of this permit.

D.2.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Reheat Furnaces - - Stack 2 and Stack 41

(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2) permitted for construction in 2001 and approved for modification in 2009 to increase its nominal heat input rate from 260 MMBtu/hr to 320 MMBtu/hr.

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NO_x reheat furnace, identified as (ID# 41), permitted for construction in 2005, with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Nitrogen Oxides (NO_x) - Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the Reheat Furnace (RF) (ID# 2) shall be limited to the use of ultra low- NO_x natural gas-fired burners such that NO_x emissions shall not exceed 0.11 pound per MMBtu.

(b) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001, the Permittee shall not allow more than 189.8 million cubic feet of natural gas to be combusted in the Reheat Furnace (RF) (ID# 2) on a monthly basis averaged over a twelve (12) month period, with compliance determined at the end of each month.

D.3.2 Carbon Monoxide (CO) - Best Available Control Technology [326 IAC 2-2]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the CO emissions from the Reheat Furnace (RF) (ID# 2) shall not exceed 0.03 pound per MMBtu.

D.3.3 Reheat Furnace PSD BACT [326 IAC 2-2]

Pursuant to PSD Permit SSM183-18426-00030, issued November 21, 2005and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Permittee shall comply with the following PSD Best Available Control Technology (BACT) standards:

(a) The Reheat Furnace (ID# 41) shall use natural gas as the primary fuel and propane as back up fuel.

(b) Low NO_x burners shall be installed and utilized to reduce the NO_x emissions from the Reheat Furnace (ID# 41).

(c) The NO_x emissions from the Reheat Furnace (ID# 41) shall not exceed 0.08 pounds per MMBtu and 20.8 pounds per hour, based on a 3-hour block average.

(d) The CO emissions from the Reheat Furnace shall not exceed 0.03 pounds per MMBtu and 7.8 pounds per hour, based on a 3-hour block average.

(e) The VOC emissions from the Reheat Furnace (ID# 41) shall not exceed 0.005 pounds per MMBtu and 1.3 pounds per hour, based on a 3-hour block average.

(f) The SO_2 emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0006 pounds per MMBtu and 0.156 pounds per hour, based on a 3-hour block average.

(g) The filterable particulate matter (PM) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0019 pounds per MMBtu and 0.49 pounds per hour, based on a 3-hour block average.

(h) The filterable and condensable particulate matter (PM/PM_{10}) emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0076 pounds per MMBtu and 1.98 pounds per hour, based on a 3-hour block average.

(i) The visible emissions from the Reheat Furnace (ID# 41) Stack 41 shall not exceed 3% opacity.

(j) The lead emissions from the Reheat Furnace (ID# 41) shall not exceed 0.0005 pounds per MMBtu and 0.13 pounds per hour, based on a 3-hour block average.

(k) The mercury emissions from the Reheat Furnace (ID# 41) shall not exceed 0.00026 pounds per MMBtu and 0.068 pounds per hour, based on a 3-hour block average.

(l) Good combustion practices shall be observed.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.3.4 Low NO_x Burners [326 IAC 2-2]

Pursuant to PSD Permit SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the Reheat Furnace (ID# 41) shall utilize the low NO_x burners at all times when the Reheat Furnace (ID# 41) is in operation.

D.3.5 Testing Requirements [326 IAC 2-1.1-11]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11, the Permittee shall perform NO_x and CO testing on the Reheat Furnace (RF) (ID# 2) at least once every five (5) years from the date of the last valid compliance demonstration.

(b) Pursuant to PSD Permit SSM183-18426-00030, issued November 21, 2005 and 326 IAC 2-1.1-11, the Permittee shall test for NO_x on the Reheat Furnace stack (Stack 41) within 60 days after achieving maximum capacity, but no later than 180 days after the initial start up of the Reheat Furnace (ID# 42) utilizing methods as approved by the Commissioner.

This NO_x test shall be repeated thereafter at least once every five (5) years from the date of the last valid compliance demonstration.

(c) Testing shall be conducted in accordance with Section C.9 - Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.6 Record Keeping Requirements [326 IAC 2-7-5] [326 IAC 2-7-19]

(a) Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001, the Permittee shall maintain records of the natural gas and propane combusted in the Reheat Furnace (RF) (ID# 2) each month and make the records available upon request to IDEM, OAQ, and the US EPA.

(b) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Ladle Vacuum Degasser (LVD) and LVD Boiler - - Stack 40

One (1) ladle vacuum degasser (LVD) (ID# 40) with a nominal capacity of 300 tons per hour of steel and one (1) boiler to power the LVD. The LVD Boiler (ID# 41) has a nominal heat input capacity of 41.8 MMBtu/hr, and uses natural gas as the primary fuel, with propane as an emergency back up fuel.

Gases from the LVD are directed to the boiler for combustion in the boiler. Emissions from the boiler exhausts through a stack identified as Stack 40.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 PM/PM_{10} Limitations [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the total PM/PM_{10} (including both filterable and condensable) emissions from the LVD Boiler (ID# 41) shall not exceed 0.0076 pound per MMBtu of heat input and 0.318 pound per hour.

D.4.2 NO_x Limitations [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the NO_x emissions from the LVD Boiler (ID# 41) shall not exceed 0.04 pound per million Btu of heat input and 1.67 pounds per hour.

D.4.3 CO Limitations PSD BACT [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the CO emissions from the LVD Boiler (ID# 41) shall not exceed 0.084 pound per MMBtu of heat input and 3.51 pounds per hour.

D.4.4 VOC Limitations PSD BACT [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the VOC emissions from the LVD Boiler (ID# 41) shall not exceed 0.0026 pound per MMBtu of heat input and 0.11 pound per hour.

D.4.5 SO2 Limitations PSD BACT [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 Prevention of Significant Deterioration (PSD), the SO2 emissions from the LVD Boiler (ID# 41) shall not exceed 0.0006 pound per MMBtu of heat input and 0.025 pound per hour.

D.4.6 Operating Parameters [326 IAC 2-2]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-2 (PSD), the following conditions shall apply:

(a) Only natural gas or propane fuels shall be used in the LVD Boiler (ID# 41).

(b) The amount of natural gas used in the LVD Boiler (ID# 41) shall not exceed 209 million cubic feet per 12-consecutive month period, with compliance determined at the end of each month.

(c) The amount of propane used in the LVD Boiler (ID# 41) shall not exceed 222 kilogallons per 12 consecutive month period with compliance determined at the end of each month.

(d) Combustion emissions shall be controlled through the use of good combustion practices.

D.4.7 Preventive Maintenance Plan (PMP) [316 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 1-6-3 a Preventive Maintenance Plan (PMP), in accordance with Section B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the LVD Boiler (ID# 41).

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.4.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to PSD Permit 183-15170-00030, issued May 31, 2002 and 326 IAC 2-1.1-11, the Permittee shall perform NO_x and CO testing on the LVD Boiler (ID# 41), at least once every five (5) years from the date of the last valid compliance demonstration, using methods as approved by the Commissioner.

Testing shall be performed in compliance with Section C.9- Performance Testing.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.9 Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19] [40 CFR 60, Subpart Dc]

(a) The Permittee shall maintain records required under 40 CFR 60, Subpart Dc, at the source in a manner that they may be inspected by the IDEM, OAQ, or the US EPA, if so requested or required.

(b) Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 40 CFR 60, Subpart Dc, the Permittee shall maintain records of the amount of each type of fuel combusted in the LVD Boiler (ID# 41) each day.

(c) Pursuant to PSD Permit SSM183-15170-00030 and to document compliance with Condition D.4.6 - Operating Parameters, the Permittee shall keep records of monthly fuel used by LVD Boiler (ID# 41), including the types of fuel and amount used.

(d) Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(e) All records shall be maintained in accordance with Section C.19 - General Record Keeping Requirements of this permit.

D.4.10 Reporting Requirements [326 IAC 2-1.1-11]

Pursuant to PSD Permit SSM183-15170-00030, issued May 31, 2002 and 326 IAC 2-1.1-11 and to document compliance with Condition D.4.6 - Operating Parameters, a quarterly summary of the following:

(a) the amount of natural gas used in the LVD boiler, and

(b) the amount of propane used in the LVD boiler

shall be submitted to the address listed in Section C.20 - General Reporting Requirements, of this permit, using the reporting form (Natural Gas and Propane Usage Quarterly Report) located at the end of this permit, or its equivalent, within thirty (30) calendar days following the end of each calendar quarter.

The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) EAF dust storage silo (ID# 4), equipped with a bin vent filter for particulate control.

(b) Eight (8) raw material storage silos (ID#s 5 through 12) and the associated raw material receiving station.

Each silo is equipped with a bin vent filter for particulate control.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Particulate Matter (PM/PM_{10}) - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification 183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the filterable PM/PM_{10} emissions from each of the nine (9) storage silos shall not exceed 0.01 grains per dry standard cubic feet.

D.5.2 Visible Emission Limitation - PSD Best Available Control Technology [326 IAC 2-2]

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from each of the nine (9) storage silos shall not exceed three percent (3%) opacity.

(b) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from the EAFs dust handling system and the raw material receiving station shall not exceed three percent (3%) opacity or greater based on a six-minute average (24 readings taken in accordance with 40 CFR Part 60, Appendix A, Method 9).

D.5.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A (General Provisions), which are incorporated by reference in 326 IAC 12-1, apply to the EAF Dust Handling System except when otherwise specified in 40 CFR Part 60, Subpart AAa.

D.5.4 Visible Emission Limitations [40 CFR Part 60, Subpart AAa]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 40 CFR 60.272a(a), the Permittee shall not cause to discharge into the atmosphere from the EAF Dust Handling System any gases that exhibit ten percent (10%) opacity or greater.

D.5.5 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the bin vent filters.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.5.6 Bin Vent Operation [326 IAC 2-2]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 Prevention of

Significant Deterioration (PSD), the bin vent filters shall be in operation and control emissions at all times when the storage silos are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.7 Visible Emissions Notations [326 IAC 2-1.1-11]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-1.1-11:

(a) Weekly visible emission notations of the nine (9) storage silos exhaust vents and the raw material receiving station shall be performed during normal daylight operations when loading or unloading material. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, when the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C-.16 Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C-.16 Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.5.8 Broken or Failed Bin Vent Filter Detection [326 IAC 2-1.1-11]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001and 326 IAC 2-1.1-11:

In the event that filter failure has been observed, for single compartment filters, failed units and the associated process will be shut down as soon as possible until the failed units have been repaired or replaced.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.9 Record Keeping Requirements [326 IAC 2-7-5] [326 IAC 2-7-19]

(a) Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and to document compliance with Condition D.5.2 - Visible Emission Limitation PSD BACT, the Permittee shall maintain records of the following and make the records available upon request to IDEM, OAQ, and the US EPA:

(i) Weekly visible emission notations of the bin vent exhaust and raw material receiving station.

(ii) Documentation of all response steps implemented for every event that visible emissions were noted to be “abnormal”.

(b) All records shall be maintained in accordance with Condition C.19 - General Record Keeping Requirements of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

A slag handling and processing area (ID# 14), operated by an independent contractor, with a nominal rated capacity of 250 tons per hour.

This processing area consists of slag pot dumping, deskulling, slag cooling, digging of slag pits by a front-end loader, loading of grizzly feeder by a front-end loader, crushing, screening, conveyor transfer points, loading of materials into piles, storage piles, load out of materials from piles, and vehicle movement around piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Annual Slag Production Limitation [326 IAC 2-1.1-5] [326 IAC 2-2]

Pursuant to PSD SSM 183-23905-00030, 326 IAC 2-1.1-5 and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), the Permittee shall not process more than 438,000 tons of slag per 12-consecutive month period, with compliance determined at the end of each month.

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes), the combined filterable particulate emissions from the crushing, screening, conveyor transfer points, continuous stacking operations shall not exceed 60.96 pounds per hour.

This limit is based on the nominal process weight rate of 250 tons per hour.

The pound per hour limitation was calculated using the following equation:

$E = 55.0P^{0.11}-40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour.

The above equation shall be used for extrapolation of the data for process weight rates in excess of sixty thousand (60,000) pounds per hour.

D.6.3 Visible Emission Limitations - PSD Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, PSD SSM 183-23905-00030, and 326 IAC 2-2 (PSD - Control Technology Review Requirements), the fugitive dust emissions from the various slag handling and processing operations shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (included in Section E.1 of this permit) such that the following visible emission limitations are not exceeded:

Slag Handling/Processing Operation	Visible Emission Limitation (% opacity) (six (6) minute average)
Transferring of skull slag to slag pot	10 %
Dumping of liquid slag from slag pot to slag pit and cooling	3 %
Transferring of skull slag from slag pot to skull pit	5 %
Digging skull slag pits	5 %
Digging slag pits	3 %
Stockpiling of slag adjacent to the grizzly feeder	3 %
Wind erosion of stockpiles	3 %
Crushing	3 %
Screening	3 %

Slag Handling/Processing Operation	Visible Emission Limitation (% opacity) (six (6) minute average)
Conveyor transfer points	3 %
Continuous stacking of processed slag to stockpiles	3 %
Loadout of processed slag from stockpiles to haul trucks for shipment	3 %
Inplant hauling of slag pots (filled) and processed slag	3 %

D.6.4 Preventive Maintenance Plan (PMP) [326 IAC 1-6-3] [326 IAC 2-7-5(13)]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001 and 326 IAC 1-6-3, a Preventive Maintenance Plan (PMP), in accordance with Condition B.10 - Preventive Maintenance Plan (PMP), of this permit, is required for the slag handling and processing operations associated control devices.

Compliance Determination Requirements [326 IAC 2-1.1-11]

D.6.5 Testing Requirements [326 IAC 2-2]

Pursuant to PSD CP 183-10097-00030, issued July 7, 1999, amended by PSD SSM 183-12692-00030, issued January 10, 2001, the Permittee shall perform a compliance test for opacity on the above-mentioned slag handling and processing operations, utilizing 40 CFR Part 60, Appendix A, Method 9, or other methods as approved by the Commissioner at least once every five (5) years from the date of the last valid compliance demonstration.

Testing shall be conducted in accordance with Section C.9 - Performance Testing.

D.6.6 Visible Emissions Notations

(a) Visible emission notations of the slag handling processes shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, at least eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C.16 Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C.16 Response to Excursions or Exceedances shall be considered a deviation from this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.7 Record Keeping Requirements [326 IAC 2-7-19]

Pursuant to PSD SSM 183-18426-00030, issued November 18, 2005, the Permittee shall maintain records of the following:

(a) To document compliance with Condition D.6.1 - Annual Slag Production Limitation, the Permittee shall maintain records of the amount of slag processed.

(b) To document compliance with Condition D.6.6, the Permittee shall maintain a daily record of the visible emission notations required by that condition. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(c) All records shall be maintained in accordance with Condition C.20 - General Record Keeping Requirements of this permit.

D.6.8 Reporting Requirements [326 IAC 2-1.1-11]

Pursuant to SSM183-18426-00030, issued, November 21, 2005 and to document compliance with Condition D.6.1 - Annual Slag Production Limitation, the Permittee shall submit a quarterly summary of the amount of slag processed, using the reporting form (Slag Production Report) located at the end of this permit, or its equivalent, not later than thirty (30) days after the end of the quarter being reported and in accordance with Section C.20 - General Reporting Requirements of this permit.

The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Fugitive Dust Emission Limitations - Best Available Control Technology [326 IAC 2-2]

Pursuant to CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the fugitive dust emissions from transporting on paved roadways and parking lots, unpaved roadways, and unpaved areas around slag storage piles and steel scrap piles shall be controlled in accordance with the Fugitive Dust Control Plan (FDCP) (Section E.1) such that the following limitations are not exceeded:

Instantaneous opacity from paved roadways and parking lots shall not exceed ten percent (10%). The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass.

The three (3) opacity readings for each vehicle pass shall be taken as follows:

(a) The first will be taken at the time of emission generation.

(b) The second will be taken five (5) seconds later.

(c) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity.

The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

Each reading shall be taken approximately four (4) feet above the surface of the paved roadway.

D.7.2 Visible Emission Limitations - Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements), the visible emissions from unpaved roadways and unpaved areas around slag storage piles and steel scrap piles shall not exceed an average instantaneous opacity of ten percent (10%).

The average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass.

The three (3) opacity readings for each vehicle pass shall be taken as follows:

(a) The first will be taken at the time of emission generation.

(b) The second will be taken five (5) seconds later.

(c) The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity.

The observer shall stand at least fifteen (15) feet, but no more than one-fourth (1/4) mile, from the plume and at approximately right angles to the plume.

Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(l) One (1) cooling tower (ID# 13), constructed in 2002, with a nominal water flow of 15,000 gallons per minute.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM/PM_{10}) - Best Available Control Technology [326 IAC 2-2]

Pursuant to PSD Permits CP183-10097-00030, issued July 7, 1999, amended by PSD Significant Source Modification SSM183-12692-00030, issued January 10, 2001 and 326 IAC 2-2 (PSD - Control Technology Review; Requirements) and the filterable PM/PM_{10} emissions from the cooling tower shall not exceed 0.008 pound per hour.

Section D.9

Facility Description [326 IAC 2-7-5(15)] Insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to three one-hundredths (0.03) grains per dry standard cubic foot and a gas flow rate less than or equal to four thousand (4,000) actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying and woodworking operations.

(b) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

(c) Cleaners and solvents characterized as:

(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or

(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit); the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. (Listed and regulated in Section D.2).

(e) A gasoline fuel transfer dispensing operation handling less than or equal to one thousand three hundred (1,300) gallons per day and filling storage tanks having a capacity equal to or less than ten thousand five hundred (10,500) gallons. Such storage tanks may be in a fixed location or on mobile equipment.

(f) Refractory storage not requiring air pollution control equipment.

(g) Equipment used exclusively for the following:

(1) Packaging lubricants and greases.

(2) Filling drums, pails, or other packaging containers with lubricating oils, waxes and greases.

(h) Production related activities, including the application of: oils; greases, lubricants; and nonvolatile material; as temporary protective coatings.

(i) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing, cutting torches, soldering, welding.[326 IAC 6-3-2]

(j) Closed loop heating and cooling systems.

(k) Solvent recycling systems with batch capacity less than or equal to one hundred (100) gallons.

(l) Water based activities, including activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to one percent (1%) by volume.

(m) Quenching operations used with heat treating processes.

(n) Repair activities, including the replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(o) Paved and unpaved roads and parking lots with public access.

(p) Conveyors as follows:

(1) Covered conveyors for coal or coke conveying of less than or equal to three hundred sixty (360) tons per day.

(2) Covered conveyors for solid raw material, including limestone conveying of less than or equal to seven thousand two hundred (7,200) tons per day for sources other than mineral processing plants constructed after August 31, 1983.

(q) Blowdown for the following: Sight glass; Boiler; Cooling tower; Compressors; and Pumps.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Particulate Emissions [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations), the particulate emissions from the brazing equipment, cutting torches, soldering equipment and welding equipment shall not exceed the particulate limitation in Section C.1 - Particulate Emission Limitations for Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour.

D.9.2 Nitrogen Oxides (NOx) –Emissions – Best Available Control technology [26 IAC 2-2]

Refer to Section D.2 of this permit for the NOx emission limits for the natural gas-fired combustion sources

SECTION E.1 FUGITIVE DUST CONTROL PLAN (FDCP)

E.1.1 Implementation and Contact

(a) The following fugitive dust control plan (FDCP), when implemented, is designed to reduce uncontrolled fugitive dust, based on a PM_{10} mass emission basis, from:

(1) paved roadways and parking lots down to 9.7 grams per square meter.

(2) unpaved areas within the slag processing area, and

(3) the slag processing operations,

such that the silt loading limitation and visible emissions limitations specified in the permit are met.

(b) This FDCP shall be implemented on a year-round basis until such time as another plan is approved or ordered by the Indiana Department of Environmental Management (IDEM).

(c) If there is a change in the name, title, and telephone number of the person who is responsible for implementing the fugitive dust control plan (FDCP), the information will be supplied to the Office of Air Quality (OAQ) Compliance Section within ninety (90) of such change.

E.1.2 Paved Roadways and Parking Lots

The following dust control measures shall be performed such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

(a) Paved roads and parking lots shall be controlled by the use of a vehicular vacuum sweeper, wet sweeping, or water flushing and shall be performed every 14 days.

(b) Since an Industrial Augmentation factor of I=1 was used for the emissions inventory, vehicles shall be limited to traveling on paved surfaces only and not allowed to enter any paved surface except from public paved roads and tarred and chipped roads.

Vehicles shall also not be allowed to travel on the shoulder of paved road ways.

(c) Upon request of the Indiana Department of Environmental Management (IDEM), Steel Dynamics, Inc. (SDI) shall sample and provide to IDEM surface material silt content and surface dust loadings in accordance with C. Cowherd, Jr., et al., Iron and Steel Plant Open Dust Source Fugitive Emission Evaluation, EPA-600/2-79-103, U.S. Environmental Protection Agency, Cincinnati, OH, May 1979.

IDEM will have the right to specify road segments to be sampled.

Steel Dynamics, Inc. (SDI) shall provide supplemental cleaning of paved road sections found to exceed the controlled silt surface loading of 9.7 grams per square meter.

(d) Cleaning of paved road segments and parking lots may be delayed by one day when:

(1) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled cleaning.

(2) The road segment is closed or abandoned. Abandoned roads will be barricaded to prevent vehicle access.

(3) It is raining at the time of the scheduled cleaning.

(4) Ambient air temperature is below 32 ^{o}F.

E.1.3 Unpaved Areas within the Slag Processing Area and Scrap Yard

The following dust control measures shall be performed such that the visible emission limitations in the permit are met. Visible emissions shall be determined in accordance with the procedures specified in the permit.

(a) Unpaved areas traveled around slag storage piles and steel scrap piles shall be treated with an IDEM-approved dust suppressant in order to meet compliance with the associated visible emissions limitations.

(b) Fugitive dust emissions shall be reduced by at least 90 percent (90%) instantaneous control on a PM_{10} mass emission basis.

(c) Treating of unpaved areas may be delayed by one day when:

(1) 0.1 or more inches of rain has accumulated during the 24-hour period prior to the scheduled treatment.

(2) Unpaved areas are saturated with water such that chemical dust suppressants cannot be accepted by the surface.

(3) Unpaved areas are frozen or covered by ice, snow, or standing water.

(4) The area is closed or abandoned.

(5) It is raining at the time of the scheduled treatment.

(6) The ambient air temperature is below 32^{0}F.

E.1.4 Wind Erosion from Open Slag Piles

Open slag piles consist of slag in various stages of processing.

To maintain product quality and chemical stability, watering the stockpiles shall be the primary means of dust control.

Water must be limited so as to keep the moisture content of the product within standards.

Slag piles shall be sprayed with water, on an “as-needed” basis to eliminate wind erosion and not exceed the visible emission limitations in the permit. Water added to the product during processing provides added control. Visible emissions shall be determined in accordance with the procedures specified in the permit.

E.1.5 Slag Handling and Processing

(a) During transferring of the skull slag to the slag pot, the drop height shall be minimized and the transferring shall be done slowly such that the visible emission limitations in the permit are not exceeded.

(b) Pouring of liquid slag from the EAFs or LMS to the slag pot shall be conducted inside the melt shop and emissions shall be captured by the melt shop roof canopy and ducted to the EAF baghouse.

(c) Emissions during the dumping of liquid slag from the slag pot to the slag pit shall be controlled by the use of skull slag and by applying water, as needed, such that the visible emission limitations in the permit are not exceeded.

(d) Water suppression to control emissions during the transferring of the skull slag from the slag pot to the skull pit can be waived for safety reasons.

(e) Emissions during the digging of the slag and skull pit by front-end loaders shall be controlled by applying water, as needed, such that the visible emission limitations in the permit are not exceeded.

(f) Emissions from slag processing operations shall be controlled, as needed, through the application of water.

Spray bars shall be used to apply water on crushing and screening operations, and conveyor transfer points.

(g) The stacker to pile drop height shall be limited to less than 48 inches, and front end loader batch drop height into trucks shall be limited to less than 48 inches.

E.1.6 Vehicle Speed Control

(a) Speed limits on paved roads shall be posted to be 20 mph.

(b) Speed limits on unpaved areas shall be 10 mph.

(c) All traffic on paved and unpaved roads shall obey the posted speed limits.

(d) Compliance with the above mentioned speed limits shall be monitored by plant security guards.

(e) Upon violation, employees shall receive a written warning, followed by a one day suspension if a second violation occurs.

(f) Visitors to the plant shall be denied access if repeated violations occur.

E.1.7 Material Spill Control

Incidents of material spillage on plant property shall be investigated by the person responsible for implementing the plan.

That person shall arrange for prompt cleanup and shall contact the party responsible for the spill to insure that prompt corrective action is taken.

E.1.8 Monitoring and Recording Keeping

Daily records of the vacuum sweeping, wet sweeping, or water flushing and spill control activities, and dust suppressant application frequency and amount shall be kept.

The records shall also contain the amount of water sprayed:

(a) on the aggregate piles,

(b) at the slag quench station, and

(c) at the slag processing spray bars.

E.1.9 Compliance Schedule

This FDCP shall be fully implemented when construction and modification is completed.

Until that time, the plan shall be implemented within portions of the site where construction is considered complete.

Where construction is incomplete, appropriate control measures shall be implemented, but cannot be comprehensively addressed.

Records of these activities shall be kept.

SECTION E.2 SCRAP MANAGEMENT PLAN (SMP)

E.2.1 General Specifications

(a) Unless specifically allowed, all grades of scrap shall be essentially free of materials containing excessive amounts of volatile organic compounds and hazardous materials.

Scrap materials with excessive amounts of volatile organic compounds and hazardous materials are referred to as contaminated scrap.

(b) All scrap material shall meet the specifications in this Scrap Management Plan (SMP) and be acceptable to Steel Dynamics, Inc. (SDI) or its scrap-processing agent.

(c) Any material that deviates from the following specifications must be noted on the purchase order and agreed to prior to shipment.

(d) Rejection of scrap material because it does not conform to the following specifications is a judgment decision of the employees responsible for inspecting the scrap material.

(e) A portion or an entire scrap load shall be rejected depending on the contaminants, placement/location of the contaminated material or frequency of occurrence.

E.2.2 Scrap Specifications

(a) Hazardous Material
Scrap received with evidence of hazardous material, or hazardous material containers, shall be rejected.

(b) Lead
The presence of babbit, solder, balancing weights, or materials with excessive amounts of lead-based paint shall be removed, or the load shall be rejected.

(c) Non-Ferrous Material
Non-ferrous scrap may contain elevated levels of hazardous constituents such as chromium, nickel, and lead. Such scrap is generally nonmagnetic (e.g. electric motors, aluminum pots and pans, brass, and pewter) and shall be rejected. Only scrap that is picked up by the magnets from the scrap cranes is acceptable.

(d) Tanks And Cylinders

(1) Tanks, cylinders, or sealed units may be included in shipments if the ends are cut open and prepared in a manner to insure that they are not sealed and will not retain contaminating fluids.

(2) These shall include, but are not limited to, torque converters, transmissions, rear ends, hydraulic cylinders, gas tanks, closed pipe compressors, capacitors, shock absorbers, and gearboxes.

(3) Visual presence of any of these items shall be cause for the material to be removed from the scrap or the load shall be rejected. However, coated gas tanks shall be rejected regardless of its condition or even if cut open.

(e) Mercury Switches
All mercury switches that are susceptible to removal and that are found in scrap shall be removed and disposed of. SDI shall inform automotive scrap dealers that mercury switches shall be removed from scrap wherever possible.

(f) Top-Dressing

(1) Trucks and cars must not be top-dressed with clean scrap in order to hide contaminated scrap.

(2) If evidence of top-dressing is apparent during unloading process, the contaminated scrap shall be removed or the remaining partial shipments shall be rejected.

E.2.3 Scrap Inspection Procedure

At any point in the inspection process, SDI personnel or agents working on behalf of Steel Dynamics, Inc. (SDI) shall issue warnings and accept loads with minor deficiencies or shall reject loads, which contain contaminated scrap.

(a) Scrap Inspectors
The persons responsible for inspecting the loads for contaminated scrap are the SDI employees operating the railcar or truck scales, the scrap bay and unloading operators, and yard personnel (crane operators, sorters, supervisors, etc.), Environmental Department, the scrap broker, and other agents working on behalf of SDI.

(b) Entry
(1) The scale operator shall verify that the paperwork accompanying the load matches the load.

If not, then the correct paper work shall be obtained before acceptance of the load or the load shall be rejected.

(2) The scale operator shall verify that the paperwork does not indicate the load contains contaminated scrap.

(c) Scrap Inspection
(1) The scrap bay and unloading operators or yard personnel shall inspect the top of the load to insure it complies with the specifications.

(2) Yard personnel or scrap bay operators shall observe the load being dumped to make sure the load is consistent and contains no contaminated scrap.

(3) If the scrap bay and unloading operator suspect top-dressing of the load, they shall direct the load to be magged-off to inspect for load consistency.

(4) Yard operators shall inspect the scrap during loading from stockpiles into railcars slated for delivery the scrap bay.

(5) Scrap bay operators shall inspect the scrap during loading into the charge bucket.

(6) Contaminated scrap found in the stockpile or scrap bay shall be removed and discarded in accordance with applicable rules and regulations.

(d) Load Acceptance
Loads that meet the scrap specifications in this Program may be directed for unloading and melting.

(e) Rejected Loads
(1) Loads that do not meet the specifications within this Program shall be returned to the vendor or the contaminated scrap removed from the load.

(2) Contaminated scrap that is removed from the load shall be returned to the vendor or disposed in accordance with applicable rules and regulations.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
CERTIFICATION

Source Name:	Steel Dynamics, Inc. (SDI)- Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval. Please check what document is being certified:
□ Test Result (specify)
□ Report (specify)
□ Notification (specify)
□ Affidavit (specify)
□ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Date:
Telephone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
CERTIFICATION

Source Name:	Slang Handling – On-site Contractor for Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.:	T183-17160-00030

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval. Please check what document is being certified:
□ Test Result (specify)
□ Report (specify)
□ Notification (specify)
□ Affidavit (specify)
□ Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Date:
Telephone:

Form Completed By:	
Title/Position:	
Date:	Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Part 70 Operating Permit
EMERGENCY OCCURRENCE REPORT

Source Name: Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No. T183-17160-00030

This Report consists of 2 pages. **Page 1 of 2**

This is an emergency as defined in 326 IAC 2-7-1(12)

The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and

The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

Address: 100 North Senate Avenue, Indianapolis, Indiana 46204-2251
This Emergency Occurrence Report consists of 2 pages.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:
Date/Time Emergency started
Date/Time Emergency was corrected:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM_{10}, SO_2, VOC, NO_x, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is NOT required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030
Facility:	EAF
Parameter:	Steel Production per year
Limit:	2,628,000 tons per 12-consective month period with compliance demonstrated at the end of each month

YEAR:_____

Month	Steel Production		
	Column 1	Column 2	Column 1 + Column 2
	This month (tons/month)	Previous 11 Months	12-Month Total (tons/year)

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Data Section
100 North Senate Avenue, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Facility:	LVD Boiler (ID# 41) (41.08 MMBtu/hr)
Parameters:	natural gas and propane usages
Limits:	209 MMCF of natural gas per twelve consecutive month period and 222 kilogallons of propane per twelve consecutive month period

YEAR: _____

Month	Fuel	Natural Gas and Propane Used		
		Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12-Month Total
	Natural gas (MMCF)			
	Propane (kgal)			
	Natural gas (MMCF)			
	Propane (kgal)			
	Natural gas (MMCF)			
	Propane (kgal)			

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
Compliance Branch
100 North Senate Avenue, Indianapolis, Indiana 46204-2251

Part 70 Quarterly Report

Source Name:	Slag Handling – On-site Contractor for Steel Dynamics, Inc. (SDI) - Structural and Rail Division
Source Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address:	2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Operating Permit No.	T183-17160-00030
Facility:	Slag Handling
Parameter:	slag per year
Limit:	438,000 per 12 consecutive month period with compliance demonstrated at the end of each month.

YEAR: _____

Month	Slag Production		
	Column 1	Column 2	Column 1 + Column 2
	This month (tons/month)	Previous 11 Months	12- Month Total (tons/year)

Form Completed By:
Title/Position:
Date:
Telephone:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Steel Dynamics, Inc. - Structural and Rail Division

Source Address: 2601 County Road 700 East, Columbia City, IN 46725
Mailing Address: 2601 County Road 700 East, Columbia City, IN 46725
Part 70 Permit No.: T183-17160-00030
Facility: Tundish preheaters ID# 3p, 3n, 3h and 3i
Parameter: Fuel consumption
Limit: The natural gas combusted by tundish preheaters ID# 3p, 3n, 3h and 3i shall be less than 241 million standard cubic feet (MMSCF) per twelve consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Natural gas consumption (MMSCF)	Natural gas consumption (MMSCF)	Natural gas consumption (MMSCF)
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by:
Title / Position:
Signature:
Date:
Phone:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Steel Dynamics, Inc.(SDI) - Structural and Rail Division
Source Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Mailing Address: 2601 County Road 700 East, Columbia City, Indiana 46725
Part 70 Permit No.: T183-17160-00030

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Administrative Amendment

Source Description and Location

Source Name:	Steel Dynamics, Inc. - Structural and Rail Division
Source Location:	26011 County Road 700 East, Columbia City, Indiana 46725
County:	Whitley
SIC Code:	3312
Operation Permit No.:	T 183-17160-00030
Operation Permit Issuance Date:	July 3, 2007
Administrative Amendment No.:	183-27131-00030
Permit Reviewer:	Aida De Guzman

Existing Approvals

The source was issued Part 70 Operating Permit No. 183-17160-00030 on July 3, 2007. The source has since received the following approvals:

(a) First Significant Permit Modification No. 183-24522-00030, issued on April 15, 2008.

County Attainment Status

The source is located in Whitley County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for PM2.5.

(a) Ozone Standards

(1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

(4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Whitley County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) Whitley County has been classified as attainment for PM2.5. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM2.5 emissions until 326 IAC 2-2 is revised.

(c) Whitley County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Since this source is a steel mill, it belongs to one of the twenty-eight (28) listed PSD source categories, as specified in 326 IAC 2-2-1(gg)(1).

(e) Fugitive Emissions
Since this type of operation is in one of the twenty-eight (28) listed PSD source categories under 326 IAC 2-2, fugitive emissions are counted toward the determination of PSD applicability.

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Potential To Emit* (tons/year)
PM	Greater than 100
PM_{10}	Greater than 100
SO_2	Greater than 100
VOC	Greater than 100
CO	Greater than 100
NO_x	Greater than 100
Pb	Greater than 0.6

*** This information was taken from TSD for SSM 183-23905-0030 and SPM 183-24522 issued on February 28, 2008 and April 15, 2008, respectively.**

This existing source is a major stationary source under PSD (326 IAC 2-2), because PM/PM10, SO2, VOC, CO and NOx are emitted at a rate of 100 tons per year or more, and it is in one of the twenty-eight (28) listed PSD source categories, as specified in 326 IAC 2-2-1(gg)(1).

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit* (tons/year)
A single HAP (Pb)	Less than 10
Total HAPs	Less than 25

* According to the TSD for T183-17160-00030, issued July 3, 2007.

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2006 OAQ emission data.

Pollutant	**Actual Emissions** (ton/yr)
PM	31
PM_{10}	31
SO_2	91
VOC	10
CO	74
NO_X	109
Lead (Pb)	0.59

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Steel Dynamics, Inc. - Structural and Rail Division, received on November 14, 2008, relating to the following:

(a) Modification to the burner capacity of the existing Reheat Furnace ID#2 from 260 million British thermal units per hour (MMBtu/hr) to 320 MMBtu/hr to accommodate larger pieces of steel.

The change to the reheat furnace will not affect or result in an increase to utilization from the emission units upstream or downstream of the reheat furnace.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table normally reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. In this proposed modification, the federally enforceable PSD BACT limits for NOx, CO and natural gas fuel usage will remain the same for the Reheat Furnace ID#2, although the burner capacity will be increased from 260 million British thermal units per hour (MMBtu/hr) to 320 MMBtu/hr. Therefore, the PTE before and after the modification will be based on these federally enforceable limits.

PTE Change of the Modified Process			
Pollutant	**PTE Before Modification** (ton/yr)	**PTE After Modification** (ton/yr)	**Net Difference** (ton/yr)
PM	2.2	2.2	0.0
PM_{10}	8.7	8.7	0.0
$PM_{2.5}$	8.7	8.7	0.0
SO_2	0.7	0.7	0.0
VOC	6.3	6.3	0.0
CO	34.2	34.2	0.0
NO_X	125.3	125.3	0.0
HAPs (Hexane)	2.05	2.05	0.0
Combined HAPs	2.15	2.15	0.0

(a) The proposed modification will result in a PTE net increase that is zero and is considered exempt under 326 IAC 2-7-10.5. Therefore, this reheat furnace burner capacity increase is subject to the requirements of an administrative amendment under 326 IAC 2-7-11.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of these Part 70 source and permit modifications, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Permit Level Determination – PSD (Actual to Projected Actual Test)

The Permittee has provided information as part of the application for this approval that based on Actual to Projected Actual test in 326 IAC 2-2-2(d)(3), this modification at a major stationary source will not be major for Prevention of Significant Deterioration under 326 IAC 2-2-1. IDEM, OAQ has not reviewed this information and will not be making any determination in this regard as part of this approval. The applicant will be required to keep records and report in accordance with Source obligation in 326 IAC 2-2-8. See Appendix A of this Technical Support Document for detailed emission calculations.

Process / Emission Unit	CO	PM	PM_{10}/ $PM_{2.5}$	NO_X	SO_2	VOC
Baseline Actual Emissions for Reheat Furnace ID#2 @ 260 MMBtu/hr *(2006-2008)*[a]	22.74	1.44	5.76	45.48	0.45	4.17
Could Have Accommodated Emissions [b]	2.86	0.18	0.72	5.71	0.06	0.52
Projected Actual Emissions after Modification (Reheat Furnace ID#2 Increase Burner Capacity from 260 MMBtu/hr to 320 MMBtu/hr) [c]	34.16	2.16	8.65	67.08	0.68	6.26
Emissions Increase from the Modification	**8.56**	**0.54**	**2.17**	**15.89**	**0.17**	**1.57**
PSD Significant Level	100	25	15	40	40	40

Methodology:
Emissions Increase from the Modification, tons/yr = c - (a+b)

Based on this analysis, this modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. Furthermore, this PSD BACT unit is not subject to a PSD BACT re-opening because it is capable of meeting its current PSD BACT limits for NOx, CO and fuel usage. Therefore, this modification is not subject to Prevention of Significant Deterioration under 326 IAC 2-2.

Federal Rule Applicability Determination

(a) There are no federal rules determined to be applicable to the existing Reheat Furnace ID#2. Its proposed modification will not change this determination.

State Rule Applicability Determination

(a) 326 IAC 2-2 (PSD)
The modification to this existing PSD Reheat Furnace will not result in a change to its PSD BACT NOx and CO emission limits, including the fuel usage limit required as PSD BACT limits. Therefore, this modification is not subject to Prevention of Significant Deterioration under 326 IAC 2-2.

(b) No other state rules have been determined to be applicable to this Reheat Furnace ID#2.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination

Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The following Compliance Determination and Monitoring Requirements applicable to Reheat Furnace ID#2 will not change as a result of this modification:

(a) CO and NOx stack testing once every five (5) years from the date of the last valid compliance demonstration.

In addition to the CO and NOx stack testing required under the Compliance Determination, Monitoring and Record Keeping of the natural gas usage, and the use of low NOx burners fired by natural gas only are required to continuously demonstrate compliance with the PSD BACT CO and NOx limits.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T183-17160-00030, issued on July 3, 2007. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

(*a) Section A.2 and Section D.3 have been revised to reflect the new heat input capacity of the Reheat Furnace ID#2. However, no changes have been made to the PSD BACT limits for CO and NOx, including the natural gas fuel usage limits as a result of this modification.*

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Reheat Furnaces - - Stack 2 and Stack 41

(1) One (1) natural gas-fired low NO_x reheat furnace (RH) (ID# 2**)** ~~constructed in September 2001 with a nominal heat input rate of 260 MMBtu/hr~~ **permitted for construction in 2001 and approved for modification in 2009 to increase its nominal heat input rate from 260 MMBtu/hr to 320 MMBtu/hr.**

Combustion and process emissions from the RH (ID# 2) exhaust through a stack identified as Stack 2.

(2) One (1) natural gas-fired low NO_x reheat furnace, identified as (ID# 41), **permitted for construction in 2005**, with a nominal heat input rate of 260 MMBtu/hr.

Combustion and process emissions from this reheat furnace (ID# 41) exhaust through a stack, identified as Stack 41.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Conclusion and Recommendation

The Reheat Furnace ID#2 shall be subject to the conditions of the attached Administrative Amendment No.183-27131-00030. The staff recommends to the Commissioner that this Administrative Amendment No.183-27131-00030 shall be approved.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
Utility Boiler

Company Name: Steel Dynamics, Inc., Structural and Rail Division
Address City IN Zip: 26011 County Road 700 East, Columbia City, IN 46725
Permit Number: 183-27131
Plt ID: 183-00030
Reviewer: Aida De Guzman
Date Application Received: 13-Nov-2008

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr	
320.0	Reheat furnace	2277.6	The source will keep the same n. g. usage limit

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	110.0 **see below	5.5	30.0
Potential Emission in tons/yr	2.2	8.7	0.7	125.3	6.3	34.2

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factor (EF) for NOx and CO EF were based on federally enforceable PSD BACT limits.

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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HAPs Emissions

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	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.39E-03	1.37E-03	8.54E-02	2.05E+00	3.87E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.69E-04	1.25E-03	1.59E-03	4.33E-04	2.39E-03

worst single HAP	2.05 tons/yr
combined HAPs	2.15 tons/yr

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
260.0	Reheat furnace	2277.6

	Pollutant					
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Emission Factor in lb/MMCF	1.9	7.6	0.6	110.0 **see below	5.5	30.0
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	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
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Potential Emission in tons/yr	2.39E-03	1.37E-03	8.54E-02	2.05E+00	3.87E-03

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.69E-04	1.25E-03	1.59E-03	4.33E-04	2.39E-03

Worst Single HAP	2.05 tons/yr
Combined HAPs	2.15 tons/yr

Methodology is the same as page 1.

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POLLUTANT	PSD/ Emisison Offset Major Modification Threshold , tons/year	Baseline Actual Emissions [d], tons/year	Projected Actual Emissions, tons/year	Projected Actual minus Baseline Actual, tons/year	Could have Accomodated Emissions [b], tons/year	Net Emissions Increase [c], tons/year
PM	25	1.44	2.16	0.72	0.18	0.54
PM10/PM-2.5[a]	15	5.76	8.65	2.89	0.72	2.17
SO2	40	0.45	0.68	0.23	0.06	0.17
NOx	40	45.48	67.08	21.60	5.71	15.89
VOC	40	4.17	6.26	2.09	0.52	1.57
CO	100	22.74	34.16	11.42	2.86	8.56
Lead	6.00E-01	3.70E-04	5.69E-04	1.99E-04	4.76E-05	1.51E-04
Mercury	4.00E-04	1.97E-04	2.96E-04	9.90E-05	2.48E-05	7.42E-05
Beryllium	7.00E-03	9.10E-06	1.37E-05	4.60E-06	1.14E-06	3.46E-06

Notes:
a - per EPA policy the PM10 major modification threshold of 15 tons per/year is used for PM2.5.
b - "Could have accomodated emissions" were calculated by annualizing the maximum monthly emissions for the ten year period and subtracting the annual emissions observed during the 24 month period selected as the Baseline Actual Emissions. (see IAC 2-2-1(rr)(2)(A)(iii)).
c - Net emissions increase is the Projected actual emissions (adjusted for emissions that could have been accomodated prior to the project) minus the past actual emissions.
d - Baseline actual emissions were based from April 2006 to March 2008 normal operation.